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(71) Applicant:

**FUJI ELECTRIC CO LTD** 

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(72) Inventor:

**IGARASHI MASATERU FUJIHIRA TATSUHIKO** 

## (54) SOFT SWITCHING CIRCUIT

## (57) Abstract:

PROBLEM TO BE SOLVED: To reduce generation loss, improve conversion efficiency, constitution, and realize miniaturization or the like.

SOLUTION: In a soft switching circuit, in which a capacitor is connected in parallel with a switching element and made to perform resonance operation with a reactor, an element which is called a superjunction MOSFET which has on-resistance and a large output capacitance is used as a switching element Q2. As a result, current conduction loss is reduced, and large output capacitance is used, so that a parallel capacitor which is connected in parallel with the element Q2 in the conventional circuit can be omitted.

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